

RECORDS OF *PINNA RUDIS* (LINNAEUS, 1758) FROM THE TUSCAN ARCHIPELAGO

MARCO OLIVERIO

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Abstract: Two records of *Pinna rudis* (Linnaeus, 1758) [= *pernula* Röding, 1798] are here reported from the Tuscany area (Tyrrhenian Sea) that extend the northern known limit of the species. These records, along with the data from the SIM project "Censimento della malacofauna marina costiera italiana" are important from the ecological and conservation point of view.

Riassunto: Sono riportati due ritrovamenti di *Pinna rudis* (Linnaeus, 1758) [= *pernula* Röding, 1798] in Arcipelago Toscano. Si discute, riportando i dati inediti del progetto SIM "Censimento della malacofauna marina costiera italiana" sia la rilevanza biogeografica che l'importanza ai fini conservazionistici dei suddetti ritrovamenti, entrambi in aree sotto tutela.

MARCO OLIVERIO, Dipartimento di Biologia, Università "Roma Tre". Viale Marconi 446, I-00146 Roma, Italia..

Pinna rudis (Linnaeus, 1758 [= *pernula* Röding, 1798]) is one of the three species of the family Pinnae so far recorded for the Mediterranean Sea (SABELLI et al., 1990-1992). It is relatively frequent in the southern Mediterranean Sea mainly along North African coasts and in the Atlantic along the West African coasts. In the Mediterranean it is recorded in the 3 and 5 FAO fishery zones by BEDULLI et al. (1995).

Here two records are reported from the Tuscany area (Tyrrhenian Sea) that extend the northern known limit of the range; the species has not been previously reported for the Tuscany coasts (i.e. TERRENI, 1981, 1983).

The first record is from Giannutri Is., loc. Grotticelle, 42°15'N - 011°07'E, -13 m depth (M.O. pers.obs). The specimen has been observed several times by the author and subsequently its presence checked by other SCUBA divers at least until August 1995. The specimen lies at the base of a wall on a pebbles bottom with some detrital sediments, in an area sufficiently exposed to currents. In the nearby, especially amidst *Posidonia oceanica* beds, specimens of *Pinna nobilis* are frequent.

The other record is from Capraia Is., loc. Cala del Ceppo, 43°01'N - 009°50'E -7 m depth (F. Giusti leg.). The specimen was in environmental conditions very similar to those of the Giannutri record.

The record from Capraia Is. is at present the northernmost known for the species in Italy, and quite certainly all over its range. Both records are from very shallow water (-13 and -7 m depth respectively). *Pinna rudis* is usually met in deeper environments in the Tyrrhenian Sea (down to 90/100 m depth). According to the (unpublished) data from the SIM project "Censimento della malacofauna marina italiana" (D. Bedulli pers. comm.) the northernmost known record of the species was that from off Castiglione della Pescaia (-90 m); additional Tyrrhenian records were those from the Gulf of Naples (-35/40 m), Acciaroli (SA, -50 m), Ganzirri (ME, -75 m).

The data herein presented support the consideration by PERES (1961) on the DL biocoenosis, and by GIACOBBE & LEONARDI (1987) on the Mediterranean *Pinna*, that the bathymetric requirements are probably not the most striking limitant factors, but rather hydrodynamism (due to their filter-feeding habit) and sedimentation regime (related to their substratum preference) must be taken into consideration. In the respect it must be considered that *Pinna rudis*, in the southern Mediterranean (particularly along the North African coasts), is a shallow water species. *P. rudis* is also usually considered a 'southern' thermophilic species but the records herein presented weaken at least partly this assumption.

Finally, the records from Giannutri Is. and Capraia Is. are very important from the conservation point of view. The first is from an island that is already included in a Reserve protected at different degrees (D. Ministero Ambiente 21/7/1989); the second is from an island that will be included in the 'Arcipelago Toscano' Natural Reserve. Hopefully, the site where this very peculiar species has been found in the Capraia Is. will be considered while defining the topographic details of the Reserve.

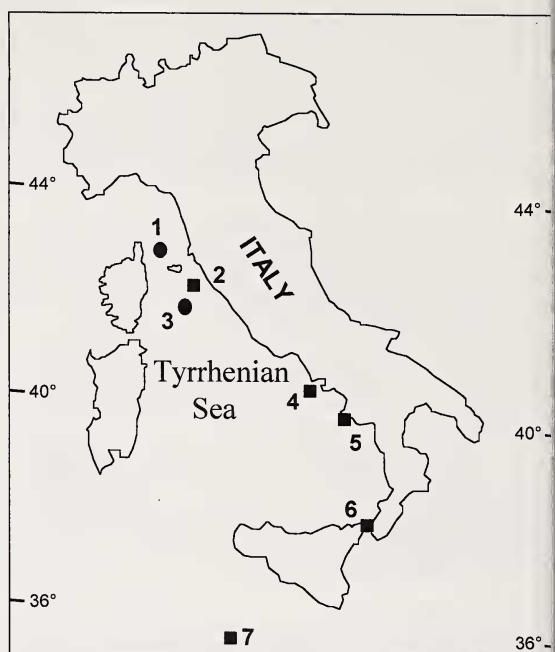


Figure. 1. Location map of the official records of *Pinna rudis* from the Italian coasts: 1- Capraia Island; 2- off Castiglione della Pescaia; 3- Giannutri Island; 4- Gulf of Naples; 5- Acciaroli; 6- Messina Strait; 7- Lampedusa Island. Circles: present data; squares: SIM 'Censimento' project.

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